(Marked-up version of the amended claims) 1 Please amend the claims as follows: 2

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--23. (Amended) An [A] improved time of flight mass spectrometer 4 comprising: [^] 5

a multideflector for deflecting ions from an ion path ٠6 consisting of more than two bipolar deflection plates each .7 comprising a pair of metal plates separated from one another by an insulator, said bipolar deflection plates being arranged 9 across said ion path in such a way that, during a given passage 10 through said multideflector, each of said ions must pass between 11 two and only two adjacent bipolar deflection plates; and

a detector for detecting said ions;

wherein each of said metal plates is energized to a potential and the potentials of the metal plates of each pair have opposite polarities.

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34. (Amended) An improved time of flight mass spectrometer [A multideflector] according to claim 31 wherein the distance between adjacent bipolar deflection plates varies as a function of position within the multideflector.

35. (Amended) An improved time of flight mass spectrometer [A 1 Ż multideflector] according to claim 34 wherein the bipolar 3 deflection plates are curved. 4 36. (Amended) An improved time of flight mass spectrometer [A · 5 multideflector] according to claim 23 wherein the potentials on . 6 the conducting electrodes is held constant. . 7 8 37. (Amended) An improved time of flight mass spectrometer [A 9 multideflector] according to claim 23 wherein the potentials on 10 the conducting electrodes is varied as a function of time. 11 12 38. (Amended) An improved time of flight mass spectrometer [A 13 14 multideflector] according to claim 32 wherein the potentials on the conducting electrodes is held constant. 15 16 39. (Amended) An improved time of flight mass spectrometer [A 17 multideflector] according to claim 32 wherein the potentials on 18 the conducting electrodes is varied as a function of time. 19 20 21

42. (Amended) A multideflector [An improved time of flight mass 1 spectrometer] according to claim 41 wherein the total thickness 2 of each bipolar deflector plate is in order of 0.1 mm. 3 4 43.(Amended) A multideflector [An improved time of flight mass **'** 5 spectrometer] according to claim 41 wherein the insulator - 6 . 7 consists of polyamide layer. 8 44. (Amended) A multideflector [An improved time of flight mass 9 spectrometer] according to claim 42 wherein the insulator 10 consists of polyamide layer. 11 12 45. (Amended) A multideflector [An improved time of flight mass 13 spectrometer] according to claim 41 wherein the bipolar 14 deflection plates are curved. 15 16 46.(Amended) A multideflector [An improved time of flight mass 17 spectrometer] according to claim 42 wherein the bipolar 18 deflection plates are curved. 19 20

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- 1 47. (Amended) <u>A multideflector</u> [An improved time of flight mass 2 spectrometer] according to claim 43 wherein the bipolar
- 3 deflection plates are curved.

5 48.(Amended) <u>A multideflector</u> [An improved time of flight mass

6 spectrometer] according to claim 44 wherein the bipolar

'7 deflection plates are curved.

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9 49. (Amended) A multideflector [An improved time of flight mass

spectrometer] according to claim 41 wherein the bipolar

11 deflection plates are placed adjacent and parallel to one another

such that each metal plate of every bipolar deflection plate is

facing the metal plate of the adjacent bipolar deflection plate

- which has the opposite polarity.
- 50. (Amended) A multideflector [An improved time of flight mass
- spectrometer] according to claim 49 wherein the distance between
- 18 adjacent bipolar deflection plates is a constant.
- 20 51. (Amended) A multideflector [An improved time of flight mass
- 21 spectrometer] according to claim 50 wherein the bipolar defection
- 22 plates are curved.--

1 REMARKS

In the March 14, 2001, Office Action, the Examiner rejected 2 the pending claims under 35 U.S.C. §§102 and 112. 3 following remarks, applicant will respond to these rejections and highlight the differences between the claimed invention and the [^] 5 cited references. With respect to the rejections under §112, - 6 applicant has amended claims 34-39 and 42-51 in accordance with the Examiner's suggestions. Applicant thanks the Examiner for 8 bringing these issues to his attention. 9 Next, with respect to the rejection of claim 41 under 35 10 U.S.C. §102(b) as being anticipated by Le Poole U.S. Patent No. 11 4,524,278 ("Le Poole"), in the opinion of the Examiner "Le 12 Poole's beam deflection system 8 is identical to the 13 multideflector claimed in the instant application." However, it 14 is black letter law that to be anticipatory a prior art reference 15 must teach each and every element of the claimed invention. 16 Applicant respectfully submits that Le Poole falls far short of 17 this requirement. 18 Generally, applicant submits that significant fundamental 19 differences exist between the beam deflection system taught by Le 20 Poole and the invention claimed in claim 41 of the subject 21 application. For example, Le Poole's beam deflection system 22

employs a single electrically insulating carrier plate (See Le 1 2 Poole col. 7, lines 58-60). In contradistinction, claim 41 of the subject application claims, inter alia, a multideflector 3 consisting of more than two bipolar deflection plates each 4 consisting of a pair of electrically conducting electrodes **•** 5 energized to potentials of opposite polarities. Nowhere in Le . 6 Poole is this either taught or suggested. Thus, Le Poole cannot ⁵7 be found to anticipate claim 41 of the subject application since 8 Le Poole fails to teach each and every element claimed therein. 9 Therefore, applicant respectfully request that this rejection be 10

reconsidered and withdrawn.

Moreover, after careful review of the cited reference, applicant fails to see how each and every element of the claimed invention is disclosed therein. Consequently, applicant invites the Examiner to point out how Le Poole teaches each and every element of the invention claimed in claim 41.

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CONCLUSION

In view of the foregoing, applicant respectfully submits that the present invention represents a patentable contribution to the art and the application is in condition for allowance.

Early and favorable action is accordingly solicited.

Respectfully submitted,

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